Application No.: 10/523,287
Filing Date: February 3, 2005

LISTING OF THE CLAIMS (No amendments have been made)

1. (Previously presented) A process for producing an *N*-monoalkyl-3-hydroxy-3-(2-thienyl)propanamine represented by General Formula (2):

$$S \longrightarrow H R$$
 (2)

wherein R is C_{1-4} alkyl, comprising the step of reducing a (*Z*)-*N*-monoalkyl-3-oxo-3-(2-thienyl)propenamine, in the presence of a carboxylic acid, represented by General Formula (1):

wherein R is as defined above.

- 2. (Original) The process according to Claim 1, wherein the (*Z*)-*N*-monoalkyl-3-oxo-3-(2-thienyl)propenamine is reduced using sodium borohydride or sodium cyanoborohydride.
- 3. (Cancelled)
- 4. (Original) A (*Z*)-*N*-monoalkyl-3-oxo-3-(2-thienyl)propenamine represented by General Formula (1):

wherein R is C_{1-4} alkyl.

5. (Original) The (*Z*)-*N*-monoalkyl-3-oxo-3-(2-thienyl)propenamine according to Claim 4, wherein R in General Formula (1) is methyl.

Application No.: 10/523,287
Filing Date: February 3, 2005

6. (Original) A process for producing a (*Z*)-*N*-monoalkyl-3-oxo-3-(2-thienyl)propenamine represented by General Formula (1):

wherein R is C_{1-4} alkyl, comprising the step of reacting an alkali metal salt of β -oxo- β -(2-thienyl)propanal represented by General Formula (3):

$$\begin{array}{c}
\bigcirc \\
S \\
\bigcirc \\
M \\
\end{array}$$
(3)

wherein M is an alkali metal atom, with a monoalkylamine compound represented by General Formula (4):

$$H_2N-R$$
 (4)

wherein R is as defined above.

7. (Previously presented) A process for producing an *N*-monoalkyl-3-hydroxy-3-(2-thienyl)propanamine represented by General Formula (2):

$$N$$
 R (2)

wherein R is C₁₋₄ alkyl, comprising the steps of:

reacting an alkali metal salt of β -oxo- β -(2-thienyl)propanal represented by General Formula (3):

$$\begin{array}{c}
\bigcirc \\
S \\
O \\
M \\
\end{array}$$
(3)

wherein M is an alkali metal atom, with a monoalkylamine compound represented by General Formula (4):

$$H_2N-R$$
 (4)

wherein R is as defined above, to give a (Z)-N-monoalkyl-3-oxo-3-(2-thienyl)propenamine represented by General Formula (1):

Application No.: 10/523,287 Filing Date: February 3, 2005

wherein R is as defined above; and

reducing the (Z)-N-monoalkyl-3-oxo-3-(2-thienyl)propenamine, in the presence of a carboxylic acid.

- 8. (Original) The process according to Claim 7, wherein the (*Z*)-*N*-monoalkyl-3-oxo-3-(2-thienyl)propenamine is reduced using sodium borohydride or sodium cyanoborohydride.
- 9. (Cancelled)